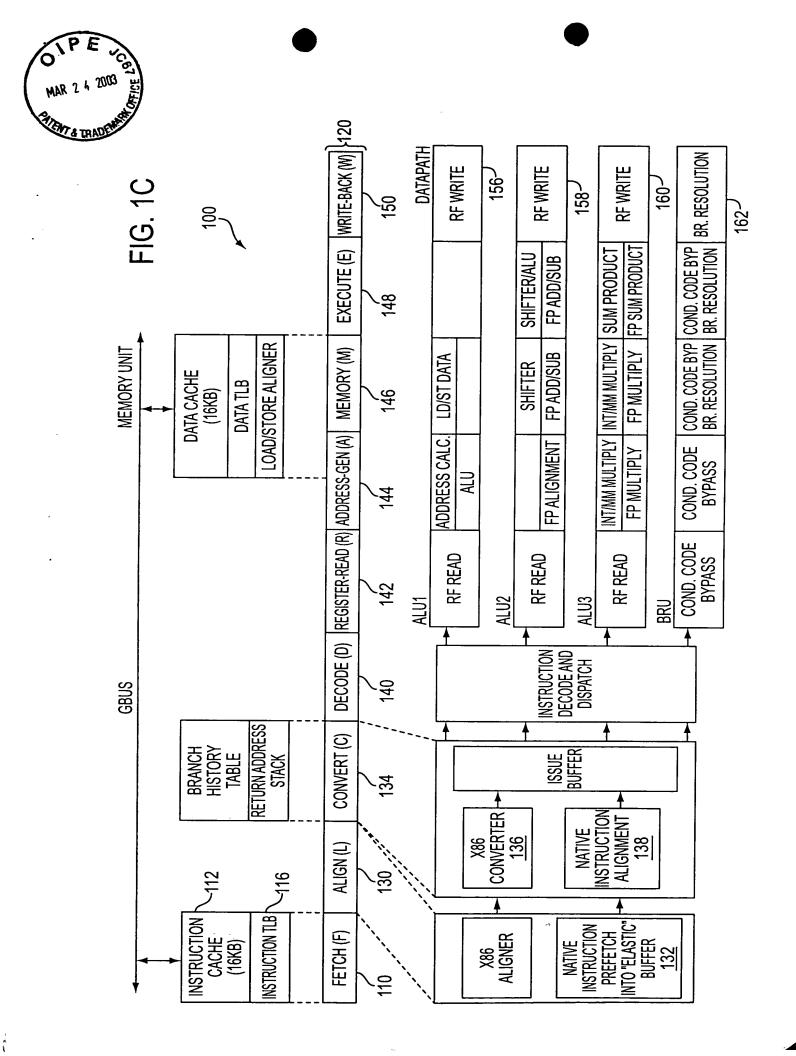


FIG. 1B





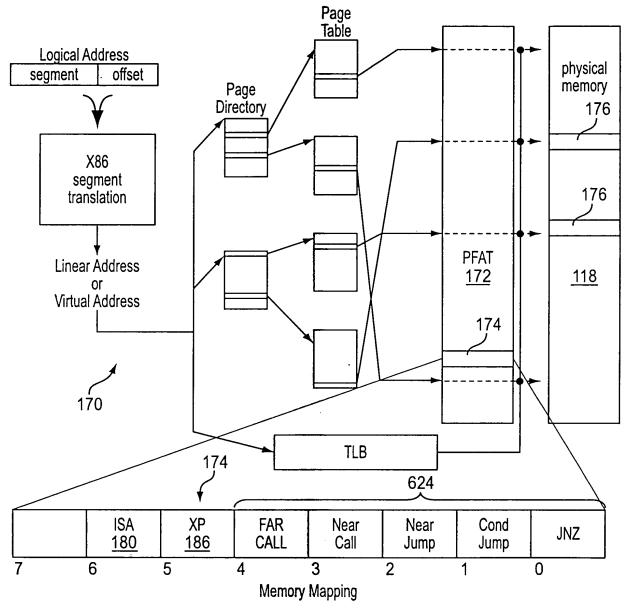
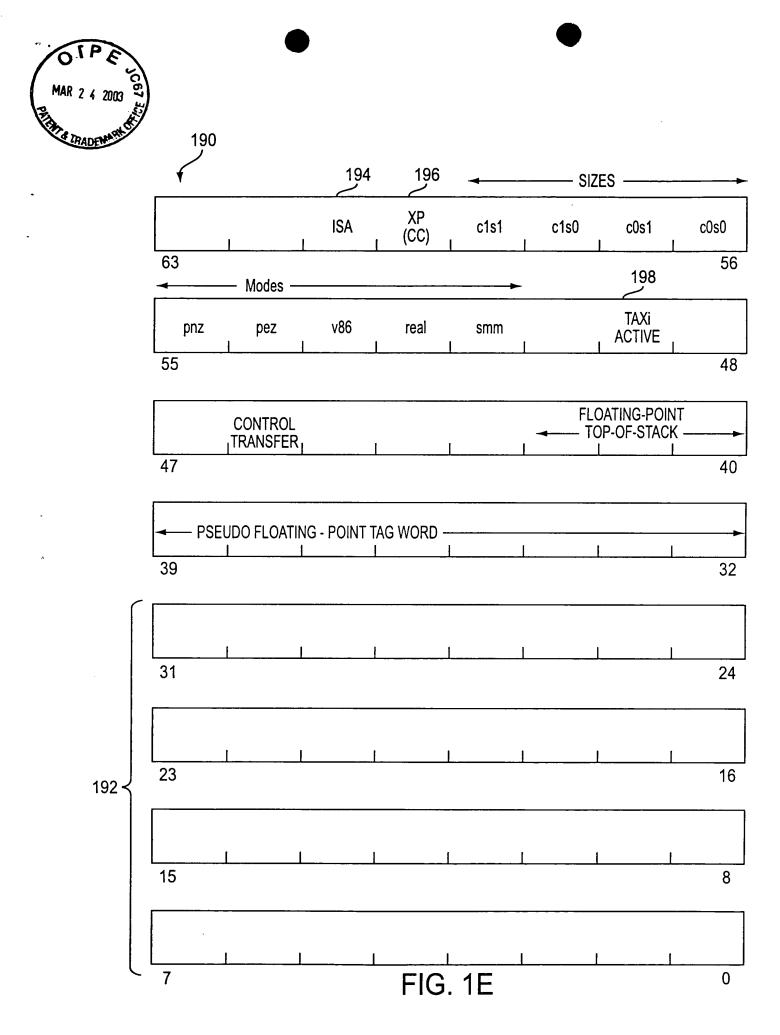


FIG. 1D





HTLB	DECODED PROPERTY VALUES			PROTECTED	INSTRUCTIONS	COLLECT PROFILE	PROBE FOR	I/O MEMORY
PROPERTY BITS	ISA 194	CC 200		INTERPRETATION	SENT TO:	TRACE- PACKETS?	TRANSLATED CODE	REFERENCE EXCEPTIONS
00	TAP	TAP	NO	NATIVE CODE OBSERVING NATIVE RISCy CALLING CONVENTIONS	NATIVE DECODER	NO	NO	FAULT IF SEG.tio
01	TAP	x86	NO	NATIVE CODE OBSERVING x86 CALLING CONVENTIONS	NATIVE DECODER	NO	NO	FAULT IF SEG.tio
10	x86	x86	NO	x86 CODE, UNPROTECTED - TAX! PROFILE COLLECTION ONLY	x86 HW CONVERTER	IF Enabled	NO	TRAP IF PROFILING
11	x86	x86	YES	x86 CODE, PROTECTED - TAX! CODE MAY BE AVAILABLE	x86 HW CONVERTER	IF Enabled	BASED ON I-TLB PROBE ATTRIBUTES	TRAP IF PROFILING

180,182, 184,186 184,186

FIG. 2A

204-TRANSITION (SOURCE => DEST) HANDLER ACTION ISA & CC PROPERTY VALUES 212-00 => 00NO TRANSITION EXCEPTION 214-VECT\_xxx\_X86\_CC EXCEPTION - HANDLER CONVERTS FROM NATIVE TO x86 CONVENTIONS 00 => 01 VECT xxx X86 CC EXCEPTION - HANDLER CONVERTS FROM NATIVE x86 CONVENTIONS, 00 => 1x 216-SETS UP EXPECTED EMULATOR AND PROFILING STATE 218-01 => 00 VECT\_xxx\_TAP\_CC EXCEPTION - HANDLER CONVERTS FROM x86 TO NATIVE CONVENTIONS 220-01 => 01 NO TRANSITION EXCEPTION VECT\_X86\_ISA EXCEPTION [CONDITIONAL BASED ON PCW.X86\_ISA\_ENABLE FLAG] 222-01 => 1x- SETS UP EXPECTED EMULATOR AND PROFILING STATE 224-1x => 00VECT\_xxx\_TAP\_CC EXCEPTION - HANDLER CONVERTS FROM x86 TO NATIVE CONVENTIONS VECT\_TAP\_ISA EXCEPTION [CONDITIONAL BASED PCW.TAP\_ISA\_ENABLE FLAG]
- NO CONVENTION CONVERSION NECESSARY 226-1x => 01228-1x => 10NO TRANSITION EXCEPTION - [PROFILE COMPLETE POSSIBLE, PROBE POSSIBLE] 230-1x => 11 NO TRANSITION EXCEPTION - [PROFILE COMPLETE POSSIBLE, PROBE NOT POSSIBLE]

## FIG. 2B

242	NAME	DESCRIPTION	TYPE
242~	VECT_call_X86_CC	PUSH ARGS, RETURN ADDRESS, SET UP x86 STATE	FAULT ON TARGET INSTRUCTION
244	VECT_jump_X86_CC	SET UP x86 STATE	FAULT ON TARGET INSTRUCTION
246~	VECT_ret_no_fp_X86_CC	RETURN VALUE TO EAX:EDX, SET UP x86 STATE	FAULT ON TARGET INSTRUCTION
250	VECT_ret_fp_X86_CC	RETURN VALUE TO x86 FP STACK, SET UP x86 STATE	FAULT ON TARGET INSTRUCTION
252	VECT_call_TAP_CC	x86 STACK ARGS, RETURN ADDRESS TO REGISTERS	FAULT ON TARGET INSTRUCTION
254	VECT_jump_TAP_CC	x86 STACK ARGS TO REGISTERS	FAULT ON TARGET INSTRUCTION
256	VECT_ret_no_fp_TAP_CC	RETURN VALUE TO RV0	FAULT ON TARGET INSTRUCTION
250	VECT_ret_any_TAP_CC	RETURN TYPE UNKNOWN, SETUP RV0 AND RVDP	FAULT ON TARGET INSTRUCTION

FIG. 2C